Bees need farms
and farms need bees.
It's that simple.

Farms need the pollination services provided by bees to grow up to a third of the crops that we produce. In return, bees need a safe environment in which to do their job.

Farmers should take an active role in protecting pollinators by making informed decisions about pesticide applications and other activities that may adversely affect bees. It starts with opening lines of communication with local beekeepers.

Working together, we can create a healthier environment for all pollinators and help keep agriculture North Carolina's No. 1 industry.

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FARM BUREAU NORTH CAROLINA®

N.C. DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES - FOUNDED 1877 -

NC STATE UNIVERSITY

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Know Your Beekeeper

Communication Is Key

FOR FARMERS

Information For Farmers

Know the Label

Some pesticide products are known to be toxic to bees, whether by direct exposure or by residues on blooming crops or weeds. These pesticide labels caution against allowing drift to blooming crops or weeds while bees are foraging in the treatment area. Prior to applying any pesticide, always read and follow the label, particularly concerning statements and restrictions regarding bees.

Integrated Pest Management (IPM)

IPM encourages using the least hazardous options to reduce the impacts to people, non-target organisms and the environment. The IPM strategy includes: 1) Reduce conditions that favor pest populations; 2) Establish an economic threshold of how much damage can be tolerated before pest control must occur; 3) Monitor pest populations; and 4) Treat/control pests when the economic threshold is reached. For more information, see: "Preventing or Mitigating Potential Negative Impacts of Pesticides on Pollinators Using Integrated Pest Management and Other Conservation Practices," USDA Agronomy Technical Note No. 9, Feb. 2014, http://directives.sc.egov.usda.gov/OpenNonWebContent.aspx?content=34828.wba

Pesticide Product Selection

Consider the crop (many flowering crops attract honey bees) and think about pollinator protection when selecting pesticides, and select formulations less toxic to honey bees. Refer to Chapter 5 of the *North Carolina Agricultural Chemicals Manual* for a listing of pesticides and their relative toxicity to honey bees. Prior to application, ensure that pesticide application equipment is clean and in good working condition to ensure the product will be applied correctly.

Timing of Insecticide Applications

The most important way to protect honey bees is to restrict spraying to the times of day when bees are not likely to visit blooms—when plants are not flowering, late evening or during cool temperatures when bees are not active. Making applications late in the day (after 3 p.m., or ideally in the evening) in sensitive areas near hives will help mitigate many risks to bees. Remember: Always follow label directions and make applications when pests reach economic threshold levels.

Notify Ground & Aerial Applicators of Hive Location(s)

Inform employees (and/or other contractual parties, including aerial applicators) of all apiary locations on or near the farm.

Wind Direction/Minimize Drift

Make insecticide applications only when winds are blowing away from hives. Select formulations and/or droplet sizes to minimize spray and drift to flowering plants or other sites attractive to bees—for example, ground cover or plants growing along fence rows and roadsides.

Application Notification

Labels of some insecticides known to be toxic to honey bees now state that beekeepers must be notified 48 hours before application. Also note that farmers are required to notify beekeepers of their intent to spray by aerial application when a pesticide labeled as toxic to bees is to be used within one-half mile of a registered apiary.

Pesticide Disposal

Dispose of unwanted pesticides and spray tank residuals safely according to label instructions. Do not contaminate water sources that honey bees may utilize. Farmers and homeowners can dispose of banned, outdated or unwanted pesticides, free of charge, through the N.C. Department of Agriculture & Consumer Services' Pesticide Disposal Assistance Program. For more information, contact Derrick Bell, NCDA&CS Structural Pest Control and Pesticides Division, at 919-280-1061 or derrick.bell@ncagr.gov.

Designated Pollinator Habitat

Consider planting a designated pollinator habitat to provide undisturbed, safe foraging areas for bees and other pollinators. Many crops benefit from the pollination services that honey bees provide. The following are good sources of information:
http://plants.usda.gov/pollinators/NRCSdocuments.html
http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/plantsanimals/pollinate

Make Connections To Protect Pollinators

The best way to ensure protection of honeybees in regions where pesticides are used is to ensure effective communication between beekeepers and farmers. Beekeepers and farmers are encouraged to have an open dialogue and to update contact information each year.

Fostering strong communication is the basis of a successful relationship. Beekeepers and farmers with operations in close proximity should know one another's name and pertinent contact information.